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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER

GRIER, L

ART UNIT

PAPER NUMBER

2644

DATE MAILED:

10/24/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

**Office Action Summary**

Application No.

09/936,559

Applicant(s)

SALLES, BERNARD

Examiner

Laura A Grier

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) 1-3, 10 and 13-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11, 17-21, 23-27, 29-36 and 49 is/are rejected.
- 7) ☒ Claim(s) 12, 22 and 28 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claim 4-9 are** rejected under 35 U.S.C. 103(a) as being unpatentable over Monti, U. S. Patent No. 5557236 in view of Henderson et al., U. S. Patent No. 5671271 and further in view of Thompson, U. S. Patent No. 5452274.

Regarding **claim 4**, Monti discloses a integrated circuit with a bi-directional pin for an audio device, constitutes as a functional unit. Monti's disclosure teaches a bi-directional pin which is adapted to operate in a dual mode – as output terminal and an input terminal, wherein an input and output circuit is obvious. However, Monti fails to specifically disclose a speaker, and an activation circuit. The examiner maintains that such components are well known in the art.

Regarding the a speaker, in a similar field of endeavor, Henderson et al. (hereinafter, "Henderson") discloses an dialer programming system system and device with integrated printing process. Henderson's disclosure comprises an integrated circuit (digital record/playback circuit, indicative of a functional unit as well) that includes a speaker for sound input and output (col. 15, lines 8-52).✓

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Monti by incorporating a speaker having dual function of providing input and output and thus further being coupled the input and output circuits for adequate performance of the processing system. However, Monti and Henderson fails to specifically disclose, and activation circuit. The examiner maintains that such a circuit was well known in the art.

Regarding the activation circuit, Thompson discloses a sound activation circuit that activates a playback device upon reception and/or detection of one's voice and releases a verbal response in regards to the input signal (abstract and figures 3-5).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Monti and Henderson by incorporating an activation circuit for the purpose of activates a playback device upon reception and/or detection of one's voice via a speaker and releases a verbal response and/or output in regards to the input.

Regarding **claims 7, 18, and 24**, Monti et al. discloses everything claimed as applied above (see claim 4). Thompson discloses a delay circuit (figure 5). It would have been obvious to one the ordinary skill in the art at the time the invention was made to modify the invention of Monti et al. by implement a time delay circuit for the purpose enabling an activation signal for selected extent of time (col. 4, 1<sup>st</sup> paragraph).

3. **Claim 5-6 and 8-9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Monti and Henderson, and Thompson (herein, "Monti et al.") in view Bobry.

Regarding **claim 5**, Monti et al. discloses everything claimed as applied above (see claim 4). Henderson et al. discloses a memory as well on the integrated circuit which constitutes a memory array (col. 15, lines 42-43). However, Monti et al. fails to specifically disclose access circuitry and a converter. The examiner maintains that such components were well known in the art.

Regard the access circuitry and a converter, in a similar field of endeavor, Bobry discloses a microprocessor 42 (access circuitry) is capable reading stored digital audio from a memory 46 in Fig. 14. Column 14, lines 36-37. The digital signal is then applied to the D/A converter 176. The output of the D/A converter 176 is an analog signal which is then amplified by an amplifier 178 to an appropriate level and applied to the transducer (column 14, lines 35-41).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Monti et al. by incorporating an access circuitry such a microprocessor and an D/A converter for the purpose of having the capability of retrieving audio data (digital) from a memory means and thus enabling the conversion of a digital signal to an analog signal for adequate form to further the signal drive by an amplifier to the speaker.

Regarding **claims 6 and 25**, Monti et al. and Bobry discloses everything claimed as applied above (see claim 5). Bobry discloses everything claimed as applied above (see claim 5). When transducer 170, its signal may be boosted to an appropriate level

by the amplifier 172, the output of which is applied to the A/D converter 174. The A/D converter 174 converts the analog signal into digital form, which can be stored in memory 46 by the microprocessor 42. Column 14, lines 30-35.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Monti et al. by incorporating A/D converter and amplifier for the purpose enabling the conversion of an analog signal to a digital signal for adequate form to further drive the signal by an amplifier to the speaker.

Regarding claim 8, it is interpreted as a combination of claims 4 and 5, and thus rejected for the same reasons set forth above.

Regarding claims 9 and 26, it is interpreted as a claim 6, and thus rejected for the same reasons set forth above.

4. **Claims 11-12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Monti et al.

Regarding claim 11, Monti et al. discloses everything claimed (see claim 4). However, Monti et al. fails to specifically disclose a three pin package as claimed. However, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Monti by incorporating a three pin package of the purpose of obvious coupling of one pin connected to the speaker and first terminal of the IC and further connected a pin to a power supply and another to ground, wherein this is a common structure or likeness of an IC chip.

5. **Claims 17 and 19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Monti et al. in view of the applicant's admitted prior art.

Monti discloses a integrated circuit with a bi-directional pin for an audio device, constitutes as a functional unit. Monti's disclosure teaches a bi-directional pin which is adapted to operate in a dual mode – as output terminal and an input terminal, wherein an input and output circuit is obvious. However, Monti fails to specifically discloses a speaker, and an activation circuit. The examiner maintains that such components are well known in the art.

Regarding the a speaker, in a similar field of endeavor, Henderson et al. (hereinafter, "Henderson") discloses an dialer programming system system and device with integrated printing process. Henderson's disclosure comprises an integrated circuit (digital record/playback circuit, indicative of a functional unit as well) that includes a speaker for sound input and output (col. 15, lines 8-52). As well, Henderson et al. discloses a memory as well on the integrated circuit which constitutes a memory array (col. 15, lines 42-43).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Monti by incorporating a speaker having dual function of providing input and output and thus further being coupled the input and output circuits for adequate performance of the processing system. However, Monti and Henderson fails to specifically disclose, and activation circuit. The examiner maintains that such a circuit was well known in the art.

Regarding the activation circuit, Thompson discloses a sound activation circuit that activates a playback device upon reception and/or detection of one's voice and releases a verbal response in regards to the input signal (abstract and figures 3-5) and wherein a controlling means is inherently taught.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Monti and Henderson by incorporating an activation circuit for the purpose of activates a playback device upon reception and/or detection of one's voice via a speaker and releases a verbal response and/or output in regards to the input.

Thus, Monti et al. fails to disclose a write circuit and a read circuit. However, the applicant's admitted prior art teaches a write circuit and a read circuit.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Monti et al. by incorporating write and read circuits for the purpose of enabling sound device to be able to receive an input and and return a response upon reception of the input signal.

6. **Claim 22** is rejected under 35 U.S.C. 103(a) as being unpatentable over Monti et al. in view of Willy (U. S. Patent No. 3979566).

Monti et al. discloses everything claimed as applied above (see claim 20). Willy discloses an improved "electromagnetic transducer that can function as either a speaker, a microphone, or a control device". Column 3 lines 3-6. In its application of a control device, tabs 124 (Figs. 19 and 20) provide bearing surfaces for armatures 116



and 118. Movement of these armatures, by touching, for example, produces electrical control responses from the speaker. Column 9 lines 44 through column 10, line 14.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the transducer taught by Willy in the audio device of Monti et al. because using this transducer would allow a greater degree of flexibility in controlling the device without increasing the number of input/output ports required.

7. **Claims 29-36 are** rejected under 35 U.S.C. 103(a) as being unpatentable over Monti et al in view of the applicant's admitted prior art.

Regarding **claim 29-31, and 33-36**, Monti discloses a integrated circuit with a bi-directional pin for an audio device, constitutes as a functional unit. Monti's disclosure teaches a bi-directional pin which is adapted to operate in a dual mode – as output terminal and an input terminal, wherein an input and output circuit is obvious. However, Monti fails to specifically disclose a speaker, and an activation circuit. The examiner maintains that such components are well known in the art.

Regarding the a speaker, in a similar field of endeavor, Henderson et al. (hereinafter, "Henderson") discloses an dialer programming system system and device with integrated printing process. Henderson's disclosure comprises an integrated circuit (digital record/playback circuit, indicative of a functional unit as well) that includes a speaker for sound input and output (col. 15, lines 8-52). As well, Henderson et al. discloses a memory as well on the integrated circuit which constitutes a memory array (col. 15, lines 42-43).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Monti by incorporating a speaker having dual function of providing input and output and thus further being coupled the input and output circuits for adequate performance of the processing system. However, Monti and Henderson fails to specifically disclose, and activation circuit. The examiner maintains that such a circuit was well known in the art.

Regarding the activation circuit, Thompson discloses a sound activation circuit that activates a playback device upon reception and/or detection of one's voice and releases a verbal response in regards to the input signal (abstract and figures 3-5.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Monti and Henderson by incorporating an activation circuit for the purpose of activates a playback device upon reception and/or detection of one's voice via a speaker and releases a verbal response and/or output in regards to the input.

Thus, Monti et al. fails to disclose a write circuit and a read circuit. However, the applicant's admitted prior art teaches a write circuit and a read circuit.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Monti et al. by incorporating write and read circuits for the purpose of enabling sound device to be able to receive an input and and return a response upon reception of the input signal.

Regarding **claim 32**, Monti et al. fails to specifically disclose the memory as FLASH EEPROM memory. The takes official notice of the fact that FLASH EEPROM memory is well known in the art.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Monti et al. by implementing the use of a FLASH EEPROM memory for the purpose of enabling reprogramming and stable storage for long periods of time, wherein the use of FLASH EEPROM memory is one of the well known memory techniques in the art of storing information signals (e.g., audio).

Regarding **claim 20**, it is interpreted and thus rejected for the same reasons set forth above in the rejection of **claim 4**. Since **claim 20** discloses a method, which correspond to the apparatus of **claim 4**, the method is inherent in that it simply provides functionality for the structure of **claim 4**.

#### ***Allowable Subject Matter***

8. **Claims 12, 22 and 28** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

13. Applicant's arguments with respect to claims 4-9, 11-12 and 17-36 have been considered but are moot in view of the new ground(s) of rejection.

Applicant mainly argues that the prior art of does not teach an activation circuit as claimed, and as a memory on a integrated circuit, and further a single integrated circuit comprising such components for a single structure. The examiner has provided reference which support such concepts and structure.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura A Grier whose telephone number is (703) 306-4819. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on (703) 305-4386.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

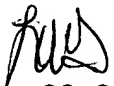
**Or faxed to:**


**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Art Unit: 2644

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

LAG   
October 22, 2001

  
FORESTER W. ISEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2700